

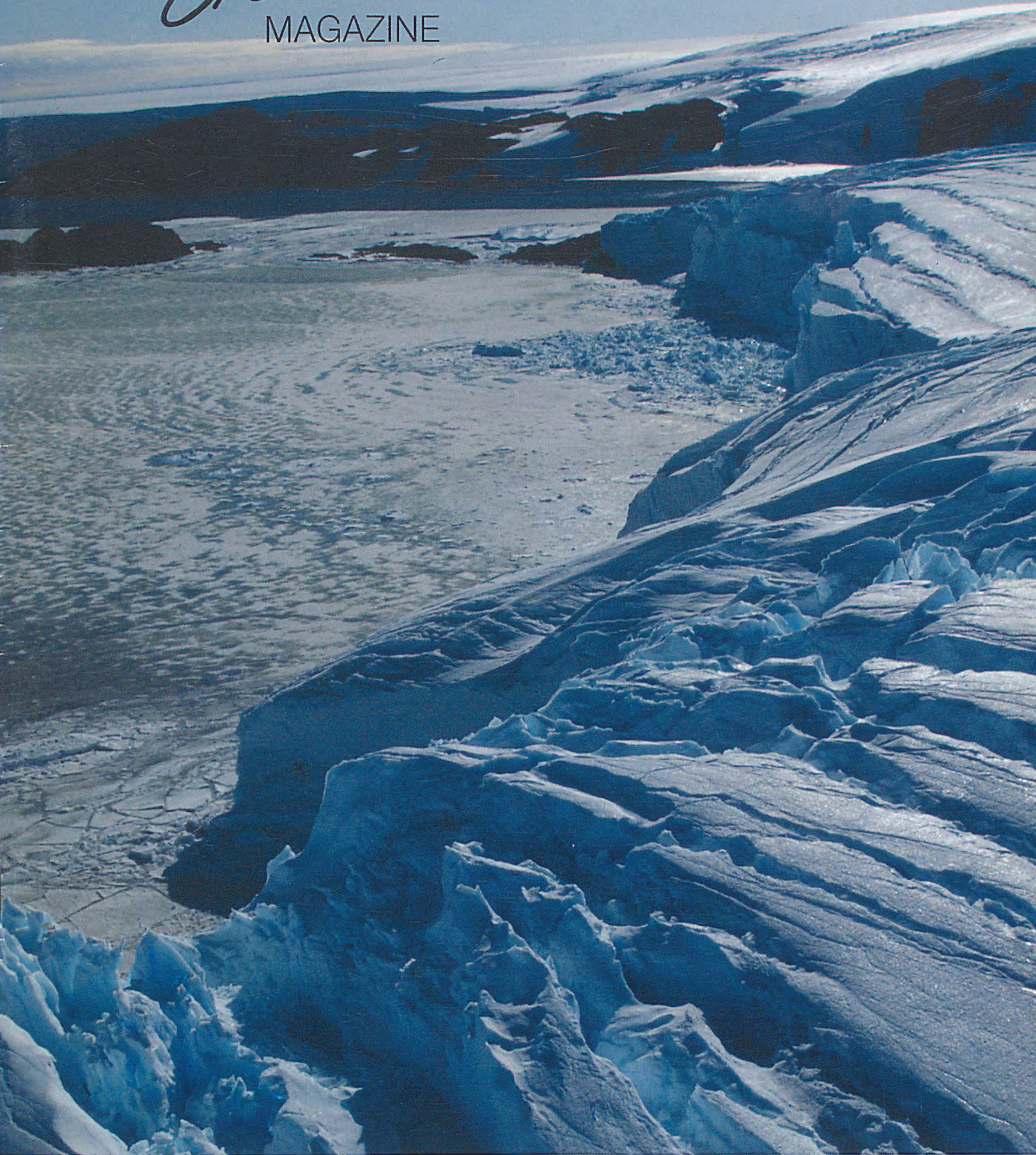
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Breaker
MAGAZINE

Sep - Nov 2011 Edition 56

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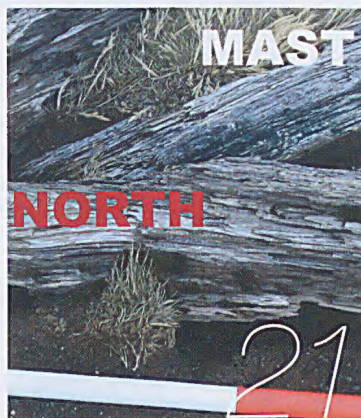
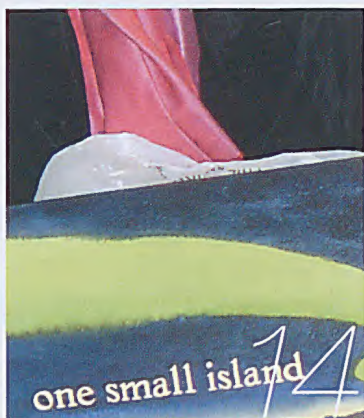
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Courtesy Frederique Olivier



Editorial

What an interesting variety of Antarctic Centennial Year events so far! I hope you have been able to attend some of them, too.

It is encouraging to meet new people attending these events, such as the woman who told me at the Longest Night Film Festival she had her grandfather's diaries and letters which referred to Mawson. To anyone else in Tasmania who has relatives involved in early Antarctic exploration, please contact the Tasmanian Museum and Art Gallery, or State Archives, so they can add to their polar references.

At the Sub-Antarctic Forum Dinner, I met people as diverse as a Victorian speleologist, and a professor who had visited every continent except Antarctica and the Arctic. When I pointed out the North Pole was just ice that was melting, he said he had better visit it soon!

Gordon Bain, who provided schools with the Ice Box, the first mobile, concentrated source of Antarctic educational items before TMAG took it over, has informed me he will not be continuing his TPN membership but will continue with his Antarctic volunteer work. Thanks Gordon, for all your contributions to Antarctic activities in Tasmania.

Thanks also to the TPN members providing flyers or banners for the TPN displays I am setting up at as many ACY events as possible. They are being well received, so if I contact you asking for more advertising material, it's worth it.

Anthea Wallhead

Editor, Ice Breaker

ICE WORDS

Ice Breaker's Editor is now a qualified freelance journalist.

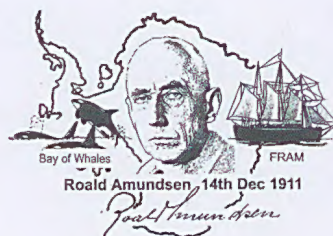
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Courtesy Klaus Arne Pedersen.*

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Thanks to Klaus Arne Pedersen, Sue Halliwell and Frederique Olivier for their permission to use their Antarctic photographs.

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Traversing Antarctica: The Australian Experience

A new exhibition, *Traversing Antarctica: the Australian Experience*, is being developed by the National Archives of Australia, to mark the centenary of the 1911–14 Australasian Antarctic Expedition, led by Douglas Mawson.

Due to open at the Tasmanian Museum and Art Gallery in Hobart on Friday 2 December 2011, the exhibition will bring together expertise and collection items from cultural institutions across Australia and will tour the nation over a four-year period.

Exhibition designers from the Western Australian Museum are working closely with curator Jane Macknight from the National Archives of Australia to make the exhibition a reality. The story is coming to life with support and additional collection items from the Australian Antarctic Division, the South Australia Museum, the Western Australian Museum and the National Film and Sound Archive.

'Australia has played and continues to play a significant role in the exploration and care of Antarctica,' said Mick Fogarty, one of the National Archives researchers who have worked alongside curator Jane Macknight to discover original records. 'It is a significant place of cultural, historical and scientific value to Australians.'

The exhibition is being developed to appeal to a wide range of visitors, from professionals with a special interest in Antarctica, to families and school groups.

One of its significant themes is celebrating the scientific and historic legacy of Mawson's Australasian Antarctic Expedition with original documents and objects, as well as innovative touch-screen displays and evocative imagery. Visitors will also have the opportunity to discover the sights and sounds of Antarctica.

'Sir Douglas Mawson and the AAE permeate every aspect of the Australian experience with Antarctica,' said Mick Fogarty. 'In our research we were fortunate to come across personal radio messages sent by Mawson when he returned to base from his ill-fated 1913 sledging trip, in which his companions Belgrave Ninnis and Xavier Mertz died.'

The sometimes tense relationship between politics and science during Australia's involvement with Antarctica is another crucial component of the exhibition. When delving into records held in the National Archives, Mick Fogarty found rivalries over territorial claims one of the most interesting aspects of his research.

'Seven nations have claimed sovereignty over sectors of the continent and other countries have explored it without lodging formal claims,' he said. 'It was the scientific community that provided an example of how countries could work together. Despite growing international tensions during the Cold War years, scientists from 12 nations worked co-operatively during the International Geophysical Year (IGY) of 1957–58 to discover more about Antarctica.'

Above: Sir Douglas Mawson taking possession of Antarctic territory at proclamation Island, 13 January 1930. (National Archives of Australia: A2442, 1)

Left: Mawson Antarctic Expedition: Four blizzard-affected Adelie penguins, probably photographed at the Cape Denison rookeries. [A lantern slide possibly photographed by James Francis Hurley, or at his direction, Autumn 1912.] (National Archives of Australia: M584, 6)



Their success paved the way for United States President Dwight D. Eisenhower to invite representatives from those 12 nations to meet in Washington with the aim of establishing a treaty. The political negotiations resulted in the Antarctic Treaty which was signed in 1959 and came into force in 1961. Its major accomplishments were to preserve Antarctica for peaceful purposes, to avoid confrontation on the issue of territorial claims and to encourage scientific cooperation with the exchange of information and personnel. It forbade testing nuclear weapons or disposing of radioactive waste on the continent.

The 12 nations which signed the original treaty were Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the Soviet Union, the United Kingdom and the United States of America. Australia played a significant role in the negotiations, being represented by Richard Casey, the Minister for External Affairs (and later Governor-General of Australia), whose keen interest in Antarctica had encouraged political support for earlier expeditions.

A later addition to the treaty, the Madrid Protocol on Environmental Protection, was signed in October 1991 and entered into force in 1998. It banned mineral and oil exploration for 50 years and included regulations for the protection of the Antarctic environment. Today, 48 countries are party to the treaty.



Continued p25 >>



David O'Byrne
Minister for Science,
Innovation and
Technology

A remarkable program

There are 100 reasons why this is an exciting time to look towards the Antarctic sector. The main reason being that from June 2011 until June 2012, Tasmania will honour the Antarctic Centennial Year – a celebration of Tasmania's enduring endeavour in the Antarctic.

Since celebrations began in June this year, Tasmanians have had the unique opportunity to promote the state's profile as an Antarctic gateway through a remarkable program rich in educational, historical and cultural events.

The growth of the Tasmanian Antarctic, Sub-Antarctic and Southern Ocean sector is a priority for the Tasmanian Government. As Minister for Economic Development, Minister for Innovation, Science and Technology, and for Infrastructure, I can play a key role in the success of the Antarctic sector.

Since the last issue of Ice Breaker Magazine, I have had the pleasure of meeting with several Antarctic stakeholders, including Australian Government Ministers, members of the Australian Antarctic Division and TasPorts, to advocate the importance of this sector to Tasmania and the vision that the State Government has to build our links with this amazing continent.

While in Canberra last month, I took the opportunity to meet with the Hon. Tony Burke, Minister for Sustainability, Environment, Water, Population and Communities, responsible for the Australian Antarctic Division; the Hon. Kim Carr, Minister for Innovation, Industry, Science and Research, and the Hon. Simon Crean, Minister for Regional Australia, Regional Development and Local Government.

I was able to reiterate to these political leaders the strategic and scientific importance of our Australian Antarctic program, which has been supported by the Tasmanian Polar Network and local industry.

It was pleasing that they too understand the importance of Antarctica to Australia and the key role that Tasmania plays.

I also highlighted the vital science undertaken by the Australian Antarctic Division, Antarctic Climate and Ecosystems Cooperative Research Centre and the CSIRO, in Tasmania, Antarctica and the Southern Ocean. This was a great opportunity to emphasise the value of these institutions to our economy, both as employers and purchasers of Tasmanian polar goods and services.

We talked about the importance of developing and maintaining quality gateway and logistics infrastructure at Hobart's port and airport, to support our international status as an important Antarctic gateway. As a shareholder Minister of TasPorts, I am very keen to ensure facilities are upgraded to accommodate growth in the sector.

Returning to the Antarctic Centennial Year, the Tasmanian Government recently sponsored the third International Forum on the Sub-Antarctic. What a fantastic event, attracting more than 100 delegates from across the globe, including Norway, South Africa, Britain, France, Australia and NZ.

Throughout the two-day forum, speakers touched on management, policy, science, industry, academia, economics, climate change and human enrichment. I also had the pleasure of meeting delegates at the forum dinner, which provided a wonderful opportunity to showcase Hobart as well.

I'd like to acknowledge Tasmania's Honorary Ambassador for the Antarctic, Sir Guy Green, who started these biennial forums back in 2006. The forums are internationally unique and add significantly to the richness of debate on the Sub-Antarctic, and Tasmania's reputation as a centre of expertise in Antarctic, Sub-Antarctic and Southern Ocean science, research and education.

Finally, I would like to encourage my fellow Tasmanians to support the Antarctic Centennial Year program, which will continue to attract international visitors to the city and offer more milestone occasions throughout the year.



Jeremy Rockliff
Deputy Leader of the
State Opposition

Investments for the future

The Antarctic Centennial Year celebrations in Tasmanian are not only a celebration of the key role that Tasmania plays as an Antarctic Gateway, but also the importance of strengthening the bond between Tasmania and Antarctica well into the future.

The next 12 months will see a number of Antarctic conferences, exhibitions and events held right across the state up until June next year, with each signifying the importance of Tasmania's relationship with the Antarctic continent.

Australia currently claims 42 per cent of the continent of Antarctica as its territory – almost 6 million square kilometres, and Tasmanian based scientists have a long history of conducting research in order to discover, understand and protect this region that we often claim as our own.

Tasmania's relative close proximity and accessibility to Antarctica is a distinct advantage to the state, but we ensure we do not take it for granted. We must continue to invest in science, research and development to ensure the ongoing protection of the region, especially in light of the effects of climate change.

Hobart is currently home to a significant percentage of Australia's Antarctic scientists, as well as national and international Antarctic organisations, and the importance of keeping Hobart as both a tourist destination and a gateway to our rich heritage is essential. The benefits to the Tasmanian economy, the tourism industry and the hospitality industry that many of these events bring to the state are invaluable.

The ACY celebrations will see people in our towns, and money spent in our shops. This can only benefit the state's tourism industry and economy, and cement Tasmania's position as Australia's Antarctic Gateway.

The millions of dollars that have been invested in strengthening the relationship between Tasmanian and Antarctica, including research and development, and the air service, will no doubt offer a number of opportunities well into the future.

The investment into an air service has dramatically changed summer season travel to Antarctic by offering flexible transport options and has already improved the way that Australia is developing its relationship with Antarctica, and shortening the duration of the trip to the continent previously undertaken by sea.

These developments have already made a significant contribution to the economic, scientific and social relationship between Tasmanian and Antarctica, but there is always room to strengthen and place a firm grip on this bond.

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Cassy O'Connor

Tasmanian Greens
Environment
spokesperson

Ocean dangers

Like so many people, I feel a primal magnetism towards the sea. In fact, one theory about how humans travelled out of Africa to populate the rest of the world was using the abundance of coastal life as the pathways along which to do so. So if this scenario is true, sea and salt are hardwired into us.

But we are now at a stage where we are in danger of responding to the life-giving bounty of the sea by killing the life it sustains.

Phytoplankton and krill are the oceans' currency of life on which pretty much all larger marine life depends. These humble but life-giving micro plants might be tiny, but they haven't been able to escape twin threats we are advancing upon them – to the very real detriment of life in our seas and beyond it.

The decline of Antarctic sea ice is now well-publicised, and is perhaps one of the best markers of global warming.

But some commentators, for example, the environmental writer Mark Lynas, are now suggesting that global sea acidification could be worse for ocean life than rising sea temperature on its own.

Unfortunately, these are two different symptoms of the same problem: our unrelenting emission of carbon dioxide into our environment.

As planetary temperatures increase, Antarctica's ice sheets shrink. Scientists have estimated that the winter air temperatures on the Western Antarctic Peninsula (WAP) have risen between 5 and 6 degrees Celsius meaning less and less sea ice forms there.

The single-celled microscopic plants, phytoplankton, grow on the underside of this sea ice. But with less ice, it has less space to inhabit. Phytoplankton are the primary food source of krill, which is often described as the most abundant species on the planet, with up to 30,000 specimens found in a cubic metre of sea water.

Due to the warmer winter air, receding sea ice and subsequently less phytoplankton, as well as sea acidification, krill numbers are plummeting – by a frightening 80 per cent in the last 20 years.

More acidic oceans are gently dissolving the shells and corals – and that includes the shells of krill – making the prospects of a recovery harder still.

The demise of krill caused by the twin-effects of carbon dioxide in the air and seas will impact huge numbers of marine animals, and the land animals which eat them – including humans.

I live in faith that it is not too late, that there is hope. With the recent discovery of green algae around ice in the Antarctic region, the populations of phytoplankton and other food sources for krill have boomed. Perhaps it is an evolutionary side-effect of global-warming?

These nutrient rich oases offer refuge and hope according to the Chief Scientist, Patricia Yager, from Amundsen Sea Polynya International Research Expedition (ASPIRE). It is vital that we don't see this as a solution, but as a boon. As the air and sea warms to foster the growth of these oases, which in turn will boost krill populations, we are only going to further see a reduction in sea ice.

This catch-22 situation will eventually bring us back to a major problem surrounding delicate ecosystems of the Antarctic region. It is for this reason, we need to act now. But before we can act, we must change our mindset that the ocean is simply a food store and waste dump. Only then can we start, and quickly, beginning to treat our oceans sustainably and forestall the effects of climate change our seas are registering.

Next time you experience the timeless wonder of the sea, whether directly, for example, on the beach, swimming, or on the TV, remind yourself that sea water really is the world's amniotic fluid from which life on earth emerged.



John Brennan
Chairman, TPN

Joining the dots

As a child, one of the most fun things I liked to do on rainy days was to colour in and also complete join-the-dots booklets. Do you remember the game of joining the dots? Before the dots were connected it was not always evident what the picture would be, but over time as one's perception developed, I found that I had a fair idea what the final picture would be. Now I can hear you thinking "what has this got to do with the Antarctic and Southern Ocean sector"?

Well let me expand from this line of childish thinking to an evolved and hopefully mature point. Those join-the-dot books were designed by someone who knew what the picture should look like. So all the dots and their relationships were pre-determined and provided the user could count, once the majority of the dots were successfully joined in sequence the picture appeared.

I have been known to rave on about the sector and its potential future. All the players/stakeholders within the sector, with respect, represent dots to me. If we plan to join all the dots according to a plan then we get an outcome.

But do we know who all the dots (stakeholders) are?

Do we have a plan to join the dots?

In joining the dots do we have a cohesive plan to reap the future benefits and gains from the sum of the whole?

A number of fundamental questions are presented, but what are the answers?

Well it's becoming apparent to me that we do not know or engage all the strategic dots within the sector. Take for example the Australian Maritime College (AMC) in Launceston. Recently I was invited by Tasports to participate as a presenter at a Regional Ports Conference held in Launceston. The conference was attended by a good number of interstate representatives of Australian port facilities, peak bodies, economists, consultants, logistics, private enterprise and the AMC.

As part of the agenda, the AMC hosted a walk through their fantastic facility with highlights such as numerous ship/tug virtual simulators and wave test pools. It was so evident to me that we have cutting edge technology with passionate and competent people operating what is arguably a world class operation. In conversation, some staff reflected upon the role the AMC played with the design of the Aurora Australis. AMC is an institution that has obvious research and commercial linkages with the Antarctic and Southern Ocean sector. I feel a bit embarrassed that I was not aware of the full spectrum of offerings available at the AMC, and of course I am lobbying them to become a member of the TPN!

So I wonder how many other dots are out there? What of a plan or vision for the entire picture? Well, the TPN has a new 3-year Strategic Plan and I know that the government has been working on a plan for the sector and this will dovetail into the forthcoming state Economic Development Plan. I would say that we are on the cusp of a broader awakening and I suggest that we all need to be vigilant for future opportunities to consolidate and grow the sector. While our joining of dots may not always be perfect we have done a good job so far and with a more concentrated and partnership approach between sector stakeholders and government, I firmly believe that we are set to grow and present Tasmania with an intelligent future.

So I leave you with this challenge. Can you think of other stakeholders who are not engaged with the sector but should be? If you happen across a few please pass them on to me so I can engage them with the TPN at email brennanenvironmental@bigpond.com.

Brennan Environmental is John's newly established business. His experience with waste operations, tendering, marketing, industry regulations and systems can assist businesses reduce costs and environmental risks, as well as improve environmental profiles and achieve sustainable outcomes.



Denzil Miller

Director, Antarctic
Tasmania, Science and
Research

Australia's Antarctic Endeavours

It is with great pleasure that I assumed the position of Director: Antarctic Tasmania, Science and Research in early June. I am very excited to again be in the 'thick' of Antarctic things, and what a time for this to have occurred.

As the Antarctic Centennial Year (ACY) celebrations are now truly in full swing, every day sees a new adventure, or dream, being realized. The most recent of these has been the Third International Sub-Antarctic Forum which was attended by more than a hundred participants from all over the world. This was truly a significant event which provided an up-to-date and intellectually-intriguing look at a fascinating part of the world.

The Forum coincided with the annual Philip Law Lecture and the first award of the Philip Law Medal.

The former was presented by the distinguished historian, Prof. Tom Griffiths, from the Australian National University in Canberra. His magical overview of Australia's Antarctic endeavours provided deep insights into Australia's pre-eminent standing in global Antarctic affairs.

Dr Martin Riddle became the inaugural recipient of the Philip Law Medal for his outstanding contribution to Antarctic affairs and the Antarctic community. Well done Martin!

Many more exciting ACY events are planned, and Ice Breaker readers are encouraged to access the Antarctic Tasmania (<http://www.development.tas.gov.au/antarctic>) and ACY (<http://www.antarcticcentennial.tas.gov.au/home>) websites for developments. A fun thing to do on the latter is to follow Douglas Mawson's 1911-1914 voyage on Twitter (<http://twitter.com/#!/douglasmawson>). I also hope to meet many readers at the various events as these unfold.

As we head out of the austral winter, a new Antarctic season beckons. To me, there is a sense of eager anticipation accompanying the 2010-2011 season.

This is as profound as the sentiments and expectations prevailing when Mawson left Hobart, and Amundsen and Scott reached the Pole a hundred years ago. To be part of this makes all of us at Antarctic Tasmania, Science and Research proud.

Touring Igloo

The American Museum of Natural History's 'Race to the End of the Earth' exhibition of Scott's and Amundsen's treks to the South Pole, finished recently at the National Geographic Society in Washington DC. The exhibition, which includes one of Tasmania's Igloo Satellite Cabins, will be open at the Palazzo Ducale in Genoa, Italy, from October 15, 2011 to March 18, 2012.

Antarctic Diaries

A transcript of a diary written by Stan Taylor, a Seaman-Stoker on the S.Y. Aurora in 1912-13 when it sailed to recover the AAE after its first winter, is now available online. The Mawson's Huts Foundation are also assisting his fourth daughter to have them published during the ACY.

The Antarctic diary of Charles Harrison, biologist and artist of the AAE, has been reproduced by Heather Rossiter. The book will be launched at Fullers bookshop in Hobart on 13th November 2011.

Stamps

Released on 2 August 2011 is the first of a four-year program of stamps illustrating the centenary of the Australasian Antarctic Expedition (1911-1914). The series will be made up of five stamps each year until 2014, with the theme of departure and journey; arrival and exploration; science and return. The first set of stamps shows Mawson's ship, SV Aurora, Captain John King Davis, The SV Aurora on Antarctic Voyage, Landing at Macquarie Island and Birdlife on Macquarie Island.



Rob Valentine
Lord Mayor

Mawson Hut Replica

As we draw closer to the centenary of Sir Douglas Mawson's departure from Hobart, the Council is pleased to announce that it has approved the development of a Mawson Hut replica, appropriately on the site opposite Mawson Place.

While the hut will be a temporary installation for a two-year period it will allow both visitors and residents an opportunity to have an "up close and personal" experience of the constricted area in which Mawson and his team of explorers survived, while living below the 67 degree S parallel at Cape Denison in Commonwealth Bay, some 3,000 kilometres to the south of Tasmania.

This experience is bound to heighten people's awareness of Antarctica and its history, and the linkages that Hobart has to the Great Southern Continent.

With the development of the Institute of Marine and Antarctic Studies (IMAS) on our waterfront there is no doubt those linkages will appear more patently obvious to the world, thus building the "Antarctic Gateway" brand that will serve us well for many years to come.

In these tough economic times it is vital that we capture the opportunities afforded our city through the establishment of IMAS thus increasing our performance and profile as the Antarctic Gateway of Australia and hopefully an increasing number of other nations.

Council looks forward to the celebrations that will follow toward the end of the year and to the ultimate re-signing of the Antarctic Treaty by member nations here in 2012.

Tasports to bring Cruise and Antarctic facility to life

Tasports will develop Macquarie Shed No 2 as a dedicated Cruise and Antarctic facility.

Tasports Chairman Dr Dan Norton and Minister for Infrastructure David O'Byrne said that the company's Board and State Government had approved the significant project, which would give Tasmania the necessary infrastructure to cater for forecast growth in cruise visits and Southern Ocean research and exploration.

"This is a remarkable development for Tasmania, which is fitting as we welcome a substantial spike in cruise ship visits for the coming season and prepare to celebrate Antarctic exploration with the upcoming centenary events," Dr Norton said.

Tasports acknowledges the input they have received from our customers and that this consultation has been a critical component of the design phase undertaken by architects Circa Morris-Nunn Walker who were appointed in October 2010.

The initial concept designs take into consideration the historic and cultural value of the shed's façade, seeking to revitalise it structurally and refit internally to provide flexible floor space for activities and operations undertaken by Cruise and Antarctic customers.

These plans will now be finalised over the next two months and will form the basis of planning approval and community consultation process. Further details and timelines will be released as they come available and Tasports will involve customers closely in the process lying ahead.

With 32 scheduled cruise visits in Hobart this coming season Tasports would aim to get works under way as soon as practically possible after the season is completed during April 2012.

Karen Rees

Segment Marketing Manager
Antarctic, Cruise and Tourism, Tasports

Spinning an Icy Yarn

Antarctica is the only place on Earth where you can walk into history and actually be there! It is a pioneer place preserved by ice, in the exact same way the explorers saw it and lived it. Their buildings are still there, lone and forlorn, a testament to the human spirit.

As spinners, we preserve a pioneer skill, one with practical application and with loving connections to the people of the past. With that in mind, what better place to show that connection than to physically return to the location of the last century and offer my own pioneer skills for Australian Antarctic History: to spin the yarn to knit a replica of Sir Douglas Mawson's balaclava, and have it auctioned to raise funds to help with the restoration of the Huts and historic site!



The spinning propellers of Aurora Expedition's cruise ship, MV Orion, guided us out of Dunedin Harbour into a rough 3m swell. Four days of voyage provided many opportunities for learning about our destination, its wildlife, history and science.

Closer to Antarctica, the seas gradually calmed until we glided into Commonwealth Bay on a mirror sea and on which the Zodiacs zipped unconcernedly around flotillas of welcoming penguins and 'bored' meetings of Weddell seals.

As we breathed in, filling our lungs with the clean air of the icy continent, we breathed in the atmosphere of 1911. Time has stopped here, paused, awaiting the return of the explorers.

When we arrived on shore, the sun was high in the sky. I gathered all my equipment: Backpack, Majacraft Double Treadle Little Gem spinning wheel (provided for this trip), spinning bag, dyed blue Corriedale Wooltop, snowboots, extra clothes in case I was cold while sitting, deck chair borrowed from Orion, and camera.

I stepped carefully over the ice, around the penguins, away from the seals and carried all the stuff on up to the Hut. To be in Antarctica – the place of my dearest dreams – and visiting the frozen time capsule of Mawson's Huts, was a thrill beyond words.

About to start the physical production of the project that will add to the history of this very spot, I paused, mindful of my surroundings and the crisp, clear air. I was really here.

The Huts in the background and the penguins with me in the foreground made my work definitively Antarctic. The very real presence of 1911, the sense of history, and the soft whirr of the wheel all blended together in the spinning of the yarn, giving it the distinctive and unique quality desired to replicate the balaclava.

Watched in puzzlement by the other Orion passengers, I assembled the wheel and set out the fibre. Observed from afar by the multitude of local penguins and seals, I filled bobbin after bobbin.



Visited by one bravely curious Adelie penguin, this little guy made sure I was spinning correctly before he left my company for that of his own family.

By the time I had completed the fibre I had set myself to do, with the Little Gem spinning wheel working perfectly, the overcast sun was still high in the sky – it was my watch that had moved to 9.30pm! No wind and zero degrees, (instead of probable blizzard and minus 18 degrees, which is the Antarctic Summer) gave me 6 hours to spin, but my tired legs and stiff fingers were happy enough to leave in the last Zodiac back to the ship. I had done it!

Back on board, I peeled off the layers of Antarctic clothing and donned my less bulky dinner clothes, ready to demolish the next sumptuous, 5-star meal – well earned and well deserved!

*Left: Mum's blue coat
Above-left: Marion Wheatland*

Right: Spinning in the cold.
Below: Inside Mawson's hut.

In contrast to the Aurora, Sir Douglas Mawson's wooden ship, fully laden and tossed on the Southern Ocean for weeks of travel to Macquarie Island and to the Cape, we made our way to Antarctica in the most modern of icebreaker ships, with satellite navigation, daily weather reports, and luxurious appointments.

Yet, we trod their same ground, we saw their same living place and we breathed their same atmosphere. We witnessed first hand the Heroic Age of Antarctic Exploration and experienced the history 1911.

You too can be part of history!

Now completed, using the 1911 pattern, the replica Balaclava will be auctioned as part of the Celebrations at the Mawson's Huts Foundation/ Australian Antarctic Division Centenary Dinner in Hobart on 1st December. Proceeds will go to the restoration of the Huts at Cape Denison. See The Mawson's Huts Foundation: www.mawsons-huts.org.au

Come to the Dinner, witness the opening of the replica huts at Constitution Dock, or bid at the auction. For more information about the trip, the balaclava or the spinning, visit: www.SpinningYarninAntarctica.com

Marion Wheatland was born in Canada and saw her first spinning of yarn at an Upper Canada village. The lady had a Great Wheel, and, to a small girl of 7 years old, it really was a great wheel – huge, in fact Spellbound, she knew she would spin one day. That day came many years later after her family had moved to Australia. Feeling that she wanted to do something for Australia and its history and with the ice continually calling, she was inspired to take her Mom's blue Kuletuk (Eskimo Parka), and her Dad's encouragement to the Extreme South.

Add in her brother's "I dare you to take your spinning wheel", and she made the booking to travel to Commonwealth Bay and achieve her goal.

Text and photos courtesy of Marion Wheatland



EXPLORING TASMANIA'S ANTARCTIC HERITAGE

POLAR PATHWAYS

Polar Pathways is a full colour, 60 page guide that takes you on a tour of Tasmania's Antarctic heritage sites. Walk in the footsteps of famous Antarctic explorers – Mawson, Amundsen and Bernacchi. Visit museums with priceless collections of Antarctic artefacts. Explore monuments, sculptures, buildings and libraries that connect you with Antarctica. Some polar pathways are as short as an hour, others as long as a whole day. On foot, by bike or in a car, with *Polar Pathways* you will discover Tasmania's Antarctic spirit.

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Price: \$10



Winter Diary

June

June 18-26

The Longest Night Film Festival at the State Theatre screened films of polar exploration over two weekends. Programme 1 included 'Frank Hurley's Antarctic footage of Mawson's expedition in 1911', 'The Nella Dan in the Antarctic' and 'Wilkins and the Voyage of the Nautilus'. Programme 2 was 'The Red Tent' about the 1928 crash of the airship 'Italia'.

July

July 5

The Royal Society of Tasmania hosted a presentation by Professor Mike Coffin, the executive Director of UTAS's Institute for Marine and Antarctic Studies (IMAS). Entitled 'Tasmania: the southern hemisphere's hub for marine and Antarctic research', Mike outlined the vision of IMAS: to advance, unify and enable temperate marine, Southern Ocean and Antarctic studies.

With CSIRO Marine and Atmospheric Research (CMAR), having 550 staff, AAD 300 staff and IMAS 135 staff, Hobart will have the biggest concentration of marine (40%) and Antarctic (40%) researchers in the world. IMAS will have a complementary research environment and infrastructure for innovative science that will build a network of national and international research, education and training collaborations.

July 15-24

67 Degrees South showing photographs from the Mawson's Huts Foundation Expeditions, were exhibited at the Long Gallery, Salamanca Arts Centre in Hobart.

July 25

A free public lecture at UTAS, entitled *Aussies on Ice: the Australian contribution to the Antarctic expeditions of Scott and Shackleton*, was given by Professor Edward Larson (see Polar Publications).

July 31

Launch of 'One Small Island', a children's book about Macquarie Island by Alison Lester and Coral Tulloch, at the Hobart Bookstore.

The Phillip Law Memorial Lecture was held at CCAMLR headquarters. The guest lecturer was Tom Griffiths, Professor of History, and Director of the Centre for Environmental History at Australian National University. Entitled 'The Culture of the Ice', Tom spoke of the anniversaries being commemorated this year and described the growing importance of Antarctica to Australia's science, politics and culture.

The lecture was followed by the presentation of the inaugural Phillip Law Medal to Dr Martin Riddle. Dr Riddle spent 20 years researching and developing guidelines to minimise human impact in Antarctica. These guidelines have now been adopted by other countries complying with the Antarctic Treaty. The award was presented by the ANARE Club vice-president Ray McMahon.

A Tasmanian Polar Network display was set up at CCAMLR to introduce those attending the lecture to the wide range of goods and services provided for Antarctic and Southern Ocean research.

Salamanca Arts Centre Quiz Night's auction theme this year was 'White Out: From Tasmania to Antarctica 100 years on'.



Dr. Martin Riddle (L) and Prof. Tom Griffiths

Alison Lester and Coral Tulloch



August

August 1-2

The Third International Forum on the Sub-Antarctic was held at the CCAMLR headquarters, with some delegates attending the Phillip Law Lecture the previous evening.

Opened by Professor Denzil Miller, new Director of Antarctic Science and Research (ATSR), the Forum covered topics such as the Sub-Antarctic being a Unique Source of Knowledge, as a Climate Change Sentinel, as a Source of Human Enrichment, as an Economic and Environmental Asset, followed by Management and Policy. The Forum had 20 speakers and there were 14 international, 12 interstate and 75 Tasmanian delegates.

P&O Polar hosted a dinner for delegates at the Henry Jones Art Hotel on Monday night.



August 24

ACE CRC hosted the Australian Antarctic Territory 75th anniversary seminar at the CSIRO auditorium. About 90 people attended for the full day of short lectures, on topics ranging from Antarctic tourism to law. The morning sessions were opened by Tasmania's Honorary Antarctic Ambassador, Sir Guy Green.



He urged Australians involved in Antarctic activities to reaffirm their commitment to Antarctic Treaty System in the future.

Professor Tom Griffiths then spoke on 'The AAT and the Evolution of the Australian Nation', noting there was little early reference to AAT in government papers because it did not fit easily within domestic or external territories. Greg Mortimer's 'A Sense of Place: Tourism to the AAT' described tourists' ongoing attraction to the wilderness in a growing virtual world, while Dr Marie Kawaja's 'Extending Australian Control over its Great Frozen Neighbour' mentioned how Antarctica was embedded in Australians' consciousness.

Mark Alcock gave an interesting account of how Australians mapped the Antarctic Continental Shelf and Professor Stuart Kaye explored 'What the AAT means in Law', citing the limitations of applying laws relating to people, in a territory with no permanent population.

Andrew Jackson's 'The AAT and the Australian Psyche' contained many humorous references to Australia's pride in its territorial claims, including having prime waterfront properties in Antarctica. An aspect of Antarctica not previously presented was 'The AAT and Australian Youth' by Indi Hodgson-Johnson. She provided some thought-provoking insights into her references to Facebook and other social media. She suggested using these as means of keeping young Australians informed about Antarctica.

Associate Professor Marcus Haward then spoke of 75 years on bipartisan support for Antarctic activities and Dr Martin Riddle explained how Antarctic science would still occur if we did not have the AAT.

Ian Allison compared Mawson's basic science equipment to the technologies now available with ships; planes and satellites and Dr Phillip Tracey discussed Australian and Antarctic climate change data.

The last session included Associate Professor Ann-Marie Brady from NZ, who explained 'Asia's Ever Increasing Engagement with Antarctica: Challenges and Opportunities', with particular reference to China, South Korea, India and Malaysia. Dr Tony Press explained 'Strategic Bifocalism: National Views in an International Context' and Richard Rowe described what the next 75 years will bring.

The seminar concluded with a live crossing to Mawson Station to acknowledge 75 years of contact, with Sir Guy Green outlining topics in the seminar to station leader Mark Williams, and Mark describing the conditions at Mawson and the significance of the anniversary.

All presentations will be available to purchase by the time this edition is printed.

Top-left: Phillip Law Medal
Above: TPN display at CCAML

Antarctic people and events



New Director

Dr Tony Fleming is the new Director of the Australian Antarctic Division, replacing Lyn Maddock, who retired in June 2011. Tony's most recent work has been with the Australian Wildlife Conservancy, and he has previous experience in working in government as well as in challenging operational and policy roles.

He has held the positions of Deputy Director-General, NSW Department of Environment and Climate Change and Head of the NSW National Parks and Wildlife Service. These included responsibilities for the growth and management of the NSW National Parks system and the management of marine parks. Previously, Tony's work involved the Commonwealth Environment Protection and Biodiversity Conservation Act and overseeing environmental science and reporting activities.

Dr Fleming has a direct family connection with Antarctica. His grandfather was Sir Raymond Priestley, who went south with both Shackleton (Nimrod expedition in 1907-09) and Scott (Terra Nova expedition 1910-1913). Priestley was also a member of Scott's Northern Party. His grandfather's sisters married Thomas Griffith Taylor and Charles 'Silas' Wright, who were both members of Scott's Terra Nova expedition.

The 6th AMOMFW

In June of this year Hobart hosted the 6th Antarctic Meteorological Observations, Modelling and Forecasting Workshop (AMOMFW). These workshops bring together international participants with both research and operational/logistical interests in Antarctic meteorology and forecasting. As in the past, the annual activities of the Automatic Weather Stations (AWS) Project from the Antarctic Meteorological Research Center (AMRC) at the Space Science and Engineering Center (University of Wisconsin-Madison, USA), and the Antarctic Mesoscale Prediction system (AMPS) Project of the Mesoscale & Microscale Meteorology Division of the National Center for Atmospheric Research (Boulder, Colorado, USA) were addressed, as these affect a diversified group involved in and/or supporting Antarctic atmospheric and related science. Thus the status of, and developments in, the AWS, AMRC, and AMPS projects was reviewed and an avenue for feedback and results from their user communities presented.

The workshop also served more broadly as a forum for current results and ideas in Antarctic meteorology, NWP, and weather forecasting, from contributors to Antarctic efforts around the world. In addition, there were more general discussions on the relationships between international AWS projects, AMRC, and AMPS projects, and other international efforts in Antarctic forecasting, logistical support, and science. Topics of mutual interest to these programs, to Antarctic weather forecasters and modellers, and support international Antarctic programs were also discussed.

Dr Neil Adams

Regional Manager, Antarctic Meteorological Section, Tasmania/Antarctic Region, Australian Bureau of Meteorology.



Participants in the 6th Antarctic Meteorological Observations, Modeling and Forecasting Workshop in Hobart between 21 and 24 June 2011.

Courtesy Dr Neil Adams.

Station leaders 2011-2012

Dave Buller will be in charge of Casey Station this year. He is an officer on secondment from the Australian Army in Canberra, with experience in logistics and amphibious craft.

Graham Cook returns to Davis station after working there in 2007, as well as at, Mawson and Casey Stations. He has previously worked as an operations manager for various enterprises.

Mark Williams, a police officer in Queensland for 30 years, will be Station Leader at Mawson. He has gained operational and managerial leadership experience with several small to large teams.

Trish McDonald will be Station Leader at Macquarie Island until mid 2012. She currently works for the Threatened Ecological Communities listing section in Canberra and has experience in feral pest control and research. She is looking forward to assisting the rabbit and rodent eradication program on Macquarie Island.



Polar News

Bear history

A US wildlife biologist, whose observation that polar bears drowned in Arctic waters helped to increase attention of global warming seven years ago, has been placed on administrative leave as officials investigate allegations of scientific misconduct. Public Employees for Environmental Responsibility have filed a complaint with the US Bureau of Ocean Energy Management, Regulation and Enforcement.

Research has traced the ancestry of every polar bear to the extinct Irish brown bear, which roamed the British Isles in the last Ice age.

Rabbits reduced

Inspectors sighted only three rabbits on Macquarie Island, after two successful bait drops. Only small offshore rock stacks remained to be treated. More than 100,000 rabbits were on the island previously.

Lost penguin

A young emperor penguin that swam to New Zealand, 3,200kms north, of Antarctica, will not be transported back to Antarctica. After being checked by a vet, the healthy penguin was left at the beach to find its own way home.

Engineering excellence

Congratulations to the Australian Antarctic Division and Hyder Consulting, for receiving an award for their new Living Quarters at Davis Station. Their use of fibre composite panels with steel structural frames resulted in faster construction times and a reduction in construction costs.

Thinner ice

Russia's environmental monitoring agency reports the Arctic ice cap is 50% smaller than average this year.

Polar play

In July, physical theatre artist Wolfe Bowart performed a play entitled "The Man the Sea Saw" at Hobart's Theatre Royal. It is about a man cast adrift on a melting iceberg, and uses combination of film, puppetry, magic, aerobatics and circus skills.

For Amundsen

As Norway is the current chair of CCAMLR, a special tribute will be arranged at this year's meetings, to commemorate Roald Amundsen's successful journey to the South Pole in December 1911.

Antarctic policy

For reference to the Lowy Institute's paper into Australia's future Antarctic Policy, see <http://www.lowyinstitute.org/>

Ongoing disagreement

Japan led a walk-out of pro-whaling nations at the 63rd International Whaling Commission in July.

Solar energy

British Antarctic Survey will be installing solar photovoltaic systems at a new Dutch science facility being built at BAS's main base, Rothera.

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Redefining "seawater" to aid climate research

The science behind understanding the movement of heat through the world's deep oceans is entering a more exact phase with the adoption of a new thermodynamic definition of what constitutes "seawater".

A specialist in thermal fluid dynamics, CSIRO Wealth from Ocean Flagship's Dr Trevor McDougall, recently led an international science team which has - following its acceptance by the Intergovernmental Oceanographic Commission - now released a new thermodynamic definition of salinity, 'heat content' and other seawater properties.

Speaking at the International Union of Geodesy and Geophysics (IUGG) conference in Melbourne as this year's Prince Albert I Medal winner, Dr McDougall said the new definition facilitates the more accurate representation of heat content and of heat uptake by the ocean.

To date the ocean's role in the climate system has been handled only in an approximate manner, both because of a lack of theoretical understanding of the "heat content" of seawater, and also the inability to calculate the required thermodynamic quantities.

The new definition of seawater gives a more accurate calculation of salinity in which, the flow velocities in the deep ocean below 1,000 metres will be more accurately calculated.

Seawater is a mixture of 96.5 per cent pure water and 3.5 per cent other material, such as salts, dissolved gases organic substances and undissolved particles. Salinity, comprising the salts washed from rocks, has been deduced to date solely using the conductivity of seawater. The new definition of seawater builds on this observational approach and additionally allows for the spatially variable composition of seawater which is not apparent in the conductivity measurements alone.

"The ocean we observe today could not have got that way without mixing of the ocean's many layers, and ocean models cannot simulate these mixing processes by themselves. Rather, the information about mixing intensity has to be put into these climate models by scientists," Dr McDougall said.

"Considerable scientific uncertainty surrounds global ocean mixing processes and there are in fact many different mixing processes at work in the ocean, some of which occur only because of the rather complicated dependence of seawater density on temperature, salinity and pressure."

Dr McDougall has discovered several of these complicated mixing processes and has shown they are important for the ocean circulation and climate, particularly in the Southern Ocean. Dr McDougall, with colleagues from Germany (Dr Rainer Feistel) and Canada (Dr Rich Pawlowicz) as well as Dr Paul Barker at CSIRO Marine and Atmospheric Research, Hobart, have generated a new, significantly more accurate international thermodynamic equation of seawater, producing a 'toolbox' for oceanographers and climate modellers.

The Prince Albert I Medal has been awarded to Dr McDougall for his fundamental advances in ocean mixing processes. He is the first Australian to receive the medal and deliver the biennial lecture to a meeting of the International Association for the Physical Sciences of the Oceans (IAPSO) being held in association with the IUGG conference.

The Prince Albert I Award was established in 2000 to recognise Prince Albert I of Monaco as the first president of the International Association for the Physical Sciences of the Oceans (IAPSO) which was established in 1919. Dr McDougall is its sixth recipient, following Professors: Walter Munk (2001), Klaus Wyrtki, Frederick Schott, Russ Davis and Harry Bryden.

Craig Macaulay, CSIRO



CSIRO's Dr Trevor McDougall

Salty spies

NASA launched a satellite in June to observe levels of salt on the surface of the world's oceans. The Aquarius/SAC-D satellite will aim to map the entire open ocean every seven days from 675km above Earth. Monthly estimates showing changes in salt levels will be made, to link salinity to climate change. Aquarius/SAC-D is the result of a global collaboration between USA, Argentina, France, Brazil, Canada and Italy.

A weather monitoring buoy 2.7m wide, 4.2, wide and weighing 1300kg was retrieved from the Southern Ocean in June this year, after surviving for 13 months. It was anchored 580 km south of Hobart in 4.6km deep water. Recorded information will be used to improve local weather forecasting and to analyse the ocean's role in climate change. The buoy will be redeployed in November.

Antarctic people and events

New Executive Director

Professor Mike Coffin was appointed the new Director of the Institute for Marine and Antarctic Studies earlier this year, and his experience in leading major national and international scientific research will be invaluable in his new role.

Previous positions include Director of Research at the UK's National Oceanographic Centre and Director of Seismic Research Centre in Tokyo, Japan. He has also spent time at Dartmouth College, Columbia University, University of Texas, the Japan Agency for Marine-Earth Science and Technology and Geoscience Australia.

Professor Coffin's expertise is in marine geophysics and he has extensive experience in the Southern Ocean. He envisions IMAS becoming a world leader in this area, by advancing science through the IMAS team's skills, expertise and efforts. Opportunities provided for students, collaborators and stakeholders will ensure IMAS becomes a research and policy institute of global significance.



Professor Mike Coffin

Thirtieth Anniversary

From October 24 to November 4 the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) will hold its 30th annual meeting at its international headquarters on Macquarie Street. The meeting will be opened by the Governor of Tasmania, the Hon. Peter Underwood.

This is an important milestone in the short history of the organisation for which the 7th April 2012 marks the 30th anniversary of the entry into force of the international convention which established the Commission. CCAMLR has maintained its secretariat headquarters in Hobart since 1982.

The CAMLR Convention is an integral component of the Antarctic Treaty system. The 1959 Antarctic Treaty led to two instruments which were initially adopted to deal with 'the preservation and conservation of living resources in Antarctica'. Confined to the Antarctic Treaty Area (south of 60°S), the first of these took the form of the 1964 Agreed Measures for the Conservation of Antarctic Fauna and Flora which entered into force in 1982. The Agreed Measures were followed by the 1972 Convention for the Conservation of Antarctic Seals (CCAS), which aimed to 'promote and achieve the objectives of protection, scientific study and rational use of Antarctic seals, and to maintain a satisfactory balance within the ecological system'. CCAS, which was also limited to the Antarctic Treaty Area, entered into force on 11 March 1978.

Extensive harvesting of fish in the Sub-Antarctic during the late 1960s and mid-1970s, along with the emergence of interest in the large-scale exploitation of Antarctic krill, raised serious concerns about the sustainability of these fisheries.

In 1975, the Antarctic Treaty Consultative Parties (ATCPs) adopted a recommendation which noted the need to 'promote and achieve within the framework of the Antarctic Treaty, the objectives of protection, scientific study and rational use of [Antarctic] marine living resources'. The Recommendation went on to focus attention on scientific study as an essential basis for protection and rational use of Antarctic marine living resources.

In 1977 Antarctic Treaty Parties were encouraged to contribute to scientific research on Antarctic marine living resources, observe interim guidelines on their conservation, and hold consultations to set up a definitive conservation regime for these resources. Formal consultations began in 1978 and concluded with the signing of the CAMLR Convention in Canberra on 20 May 1980. The CAMLR Convention entered into force on 7 April 1982. To implement the Convention, the parties established the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), comprising the original signatories and acceding parties.

During its short history, CCAMLR has often set global benchmarks for:

- operationalizing an ecosystem and precautionary approach to support the sustainable use of marine living resources, including
- reducing the number of seabirds taken incidentally in fishing operations to near zero levels, and
- in respect of mitigating the impacts of bottom fishing on vulnerable marine ecosystems;
- applying the best available science to policy and management decision-making;
- managing fisheries in data poor environments; and
- combating illegal, unregulated and unreported fishing activities in the CAMLR Convention Area.

The Mawson Legacy Part 2

According to extracts from Andrew Jackson's talk entitled 'Mawson and the National Interest', given at the Mawson's Huts Foundation Seminar in April this year, Douglas Mawson's assessment of the value of Antarctic research shows a direct connection with the modern Antarctic program and a continuous link to modern statements of national interest.

Then...

Mawson advocated a permanent Australian Antarctic program and was appointed to the ANARE Executive Planning Committee and the Scientific Advisory Committee.

Mawson had identified three core national interests in Antarctica:

- Australian sovereignty
- Antarctica's value for science
- Access to resources

He also showed an environmental interest.

In order to maintain these Antarctic/Australian links, Mawson recommended the following:

- To preserve our sovereignty over the AAT, including our sovereign rights over the adjacent offshore areas
- To take advantage of the special opportunities Antarctic offers for scientific research
- To derive any reasonable economic benefits from the living and non-living resources of the Antarctic (excluding the deriving of such benefits from mining and oil drilling)
- To be informed about, and able to influence, developments in a region geographically proximate to Australia
- To maintain Antarctic free from strategic and/or political confrontation
- To protect the Antarctic environment, with regard to its special qualities and effects on our region
- Appreciation of Antarctica's importance to Australia — continuing engagement

- Enduring credentials as an Antarctic nation driven by science
- A strong territorial claim
- Australia is taken seriously as a nation active in Antarctica

And now...

Extracts from the AAD's Science Strategic Plan 2011-12 to 2020-21:

The next ten years of Antarctic Science will focus on four themes:

- Climate Processes and Change
- Terrestrial & Nearshore Ecosystems: Environmental Change & Conservation
- Southern Ocean Ecosystems: Environmental Change & Conservation
- Frontier Science

The first three themes continue Mawson's awareness of the climate connection between Australia and Antarctica. Research will be designed to link monitoring, observational and experimental science with required processes and integrative modelling, leading to providing information to policy makers as well as conservation and resource managers.

Frontier Science will include high quality science projects that address Australia's national science priorities and will include monitoring for meteorological, ionospheric and geophysical activities, as well as hydrographic and bathymetric mapping.

One addition to Mawson's goals is the Australian Antarctic Science Program welcoming support 'by international scientists willing to contribute to advancing Australia's interests in Antarctica'.

Several speakers at the recent seminar for the 75th Anniversary of claiming of Australia's Antarctic Territory (AAT) noted the AAD's Strategic Plan did not mention Australia's commitment to reinforcing the Antarctic Treaty System, nor the maintenance of sovereignty.

Copies of AAD's current plan are available at planning@aad.gov.au



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Wireless Masts recovered

A three-person team of specialists from the Mawson's Huts Foundation has successfully recovered the remains of the wireless masts erected on Macquarie Island by members of Sir Douglas Mawson's 1911-14 Australasian Antarctic Expedition (AAE).

In partnership with Tasmanian Parks and Wildlife, the team spent a week on Macquarie Island in April as part of a joint operation to recover the masts and also undertake a survey to help conserve other AAE and early artefacts on Macquarie Island. The masts were erected and operational by March 1912 and eventually relayed the first ever wireless transmissions from the Antarctic.

Marty Passingham (heritage carpenter), Frederique Olivier (film producer) and Peter Maxwell (materials conservator) helped by AAD staff on Macquarie recovered the last three sections of the 90 foot high Douglas Fir masts from the Wireless Hill. They are now being conserved by the Foundation and will eventually be displayed at the Tasmanian Museum and Art Gallery in Hobart.

"We have a great partnership with Tas Parks and hope this will be one of several visits the Foundation makes to Macquarie to help conserve the island's history," said Marty.

"We're making a small video of the recovery and this will be sold by the Foundation to help raise funds for the conservation programme along with some special commemorative covers the Foundation is producing to mark the recovery," he said.

"The recovery is of the masts is very important, particularly with the Centenary of the AAE's departure from Hobart to be celebrated in December this year"

The team, which travelled on the *L'Astrolabe*, is currently preparing a report for Tasmanian Parks and Wildlife on the conservation of artefacts on Macquarie.



Top-left: AAE Wireless Mast, from the North. Courtesy State Library of New South Wales.

Above: Bubble wrapping and transporting the mast components. Photos: Frederique Olivier.

Below: The mast components. Photo: Frederique Olivier.

Text & photos courtesy Marty Passingham.

MAST COMPONENT 1

MAST COMPONENT 2

MAST COMPONENT 3

NORTH

NORTH

SOUTH

SOUTH

SOUTH

Polar Publications

BOOK

Antarctica: that sweep of savage splendour

Edited by Alasdair McGregor
Published by Penguin-Viking
Price: \$39.95

This is one of several books commemorating Antarctic centennial events, and contains extract from books, diaries, sledging journals, fiction and poetry. Included are accounts from Shackleton, Scott, Amundsen Mawson and Bechervaise as well as photographer Frank Hurley and author Helen Garner.

BOOK

An Empire of Ice: Scott, Shackleton and the Heroic Age of Antarctic Science

Edward Larson
Published by Yale University Press
Price: \$36.95

This book offers a new perspective on Antarctic expeditioners of the early twentieth century by focussing on their larger scientific and social context. Comparisons are drawn between Amundsen's reasons for achieving the South Pole and the British explorers' scientific aims having precedence over achieving the same goal.

The Pulitzer Prize-winning author visited Hobart in July.

ONLINE

Misty's return

For further information about Misty the husky's return to Mawson after an 18-year absence, see <http://tinyurl.com/443r4xp> and Issue 20 of the AAD's Antarctic Magazine.

BOOK

Unique and Unspoilt: A Year Among the Natural Wonders of Heard Island

Edited by Bernadette Hince
Published by National Library of Australia
Price: \$34.95

This is the edited diary of John Bechervaise, officer in charge of Heard Island base in 1953. It describes all aspects of station life at the time, with additional explanatory notes by the editor, and draws attention to the clothing, supplies and methods of communication now available.

BOOK

One Small Island

Alison Lester and Coral Tulloch
Published by Penguin
Price: \$29.95

Launched on 31 July by Professor Pat Quilty at Hobart Bookstore, this children's book tells the story of Macquarie Island, with excellent illustrations and thoroughly researched text.

BOOK

No Return: Captain Scott's Race to the Pole

Peter Gouldthorpe
Published by Hachette
Price: \$25.00

Due to be launched on September 22 at the Hobart Bookshop, this is a children's book about Scott's trek to the South Pole in 1912. The author's illustrations are based on Ponting's black and white photos.

BOOK

White Heat

M.J. McGrath
Published by Mantle
Price: \$32.99

This is a thriller based in the high Arctic. A visiting tourist is killed while on a shooting expedition led by a half-white, half-Inuit guide, who believes the death was not an accident. The author's previous book, *The Long Exile*, is non-fiction and about the history of Inuit families.

BOOK

Last Days of the Arctic

Ragnar Axelsson
Published by Crymgea
Price: \$75

Includes over 200 images showing the Arctic warming faster than any other region on earth.

BOOK

Arctic Naturalist: The life of J. Dewey Soper

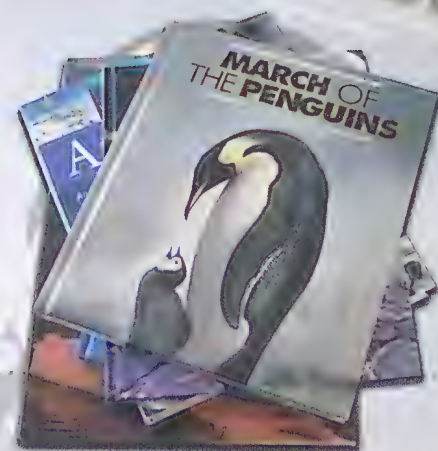
Anthony Dalton
Published by Dundurn Press
Price: \$29.99

Soper was one of the last of pioneer naturalists in Canada and the author describes Soper's adventures while investigating flora and fauna.

ONLINE

casandjonesy.com.au

Support and follow Cas and Jonesy's 2200km trek to the South Pole and return, unassisted. Funds raised will go to youth cancer centres.



Ice Birds



Elizabeth Chipman

Born: 1934

Occupation: Worked for the Antarctic Division of the Dept. of Science in Melbourne, Victoria 1954-1977.

Notable Expeditions: First Australian woman member of the ANARE Club, visiting Macquarie Island 1966-67, 1971-72 and 1975-76. One of the first Australian women to set foot on the Antarctic continent.

Achievements: Two books - 'Women on ice' (1986) and 'Australian in the frozen south' (1978).

Southern Polar Researchers



Isobel Bennett

Lived: 1909-2008

Occupation: Marine biologist.

Notable Expedition: One of the first women to go south with ANARE, visiting Macquarie Island in 1959, 1960, 1965 and 196.

Achievements: Nine books, including 'The Fringe of the Sea' (1966) and 'Shores of Macquarie Island' (1971).



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2	September	2011	TPN's AAD Tender/Procurement sessions. 9.00am-1.00pm AAD Kingston Tasmania.
2-6	September	2011	Penguin Conference. Bristol, UK. For further details, see www.penguinconference.org
7-9	September	2011	8th Symposium on Polar Studies. Palma de Mallorca, Spain.
8	September	2011	TPN AGM and General Meeting 11.30am-1.00pm. Hobart, Tasmania.
16	September	2011	International Day for the Preservation of the Ozone Layer.
23-24	September	2011	Symposium on Research Urgencies in the Polar Regions. Siena, Italy.
25-30	September	2011	Gondwana 14 - 'East Meets West'. Armação dos Búzios, Brazil.
26-30	September	2011	World Conference on Marine Biodiversity. Aberdeen, Scotland.
28	October	2011	VI Latin American Symposium on Antarctic Research. Lima, Peru.
11	October	2011	Down South: Tradies in Antarctica photographic exhibition. CCAMLR Headquarters, Hobart, Tasmania. See www.downsouth.org.au for other venues.
21	October	2011	HCC Antarctic Season launch. 6.00-7.30pm Town Hall. Hobart Tasmania.
24 4	October October	2011- 2011	CCAMLR XXX and SC-CAMLR XXX meetings. Hobart, Tasmania.
5-7	October	2011	Hydrographic Commission on Antarctica meeting. Hobart, Tasmania.
14	October	2011	Launch of Geoscience Australia's commemorative geological Cape Denison map.
26-30	November	2011	Annalise Rees exhibition based on the Mawson Collection at the S. Australian Museum.
30 1	November December	2011- 2011	Royal Society of Tasmania's 'Mawson 100 Years On: How things have changed' seminar. Hobart, Tasmania. For further details, see websites for AAD or Antarctic Tasmania.
1	December	2011	Mawson's Huts Foundation Dinner. Hobart, Tasmania.
2	December	2011	Opening of National Archives of Australia's 'Australians in Antarctica' exhibition. TMAG, Hobart, Tasmania.
2	December	2011	100th Anniversary of the departure of Mawson's expedition. - commemorative flotilla on the Derwent River, Hobart, Tasmania.
3	December	2011	Finding Antarctica: Mapping the Last Continent exhibition. NSW State Library.
5	December	2011	25th International Congress for Conservation Biology. Auckland, NZ.
15	December	2011	TPN meeting (to be confirmed). Hobart, Tasmania.
8-20	January	2012	Antarctica and the Southern Ocean sculpture exhibition by Stephen Walker. Hobart, Tas.
15	January	2012	Antarctic Sightseeing Flight. Historic commemorative flight from Melbourne to Commonwealth Bay, Antarctica.
10-11	March	2012	Centenary Re-enactment in Hobart of Amundsen's announcement of being the first to reach the South Pole.
26	March	2012	Planet Under Pressure Conference - Ice Sheets and Glaciers in a Warming World. London, UK.
8-11	March	2011	International Polar Heritage Committee Conference. Hobart, Tasmania.
4-15	June	2012	35th Antarctic Treaty Consultative Meeting. Hobart, Tasmania

centenary.antarctica.gov.au

antarcticcentennial.tas.gov.au

www.environment.gov.au/about/media/eventswww.scar.org/events

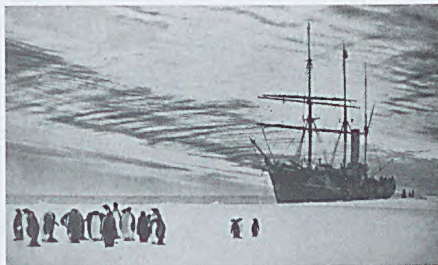
Traversing Antarctica: The Australian Experience (cont.)

The exhibition will also remind visitors that early expeditions were driven by a mix of motivations. Discovery, territorial claims and scientific investigation were all objectives but the potential for exploitation of resources, including whaling, was also a factor.

'Whaling was big business and Mawson proposed partly funding his expedition by royalties from the industry,' said Mick Fogarty. 'I find this fascinating in the light of today's attitudes towards conservation and the protocols that have since been passed.'

'In the early days, while science was an objective of the expeditions, it may have been secondary to other considerations. These days science has great significance, especially when it comes to issues such as the role of Antarctic creatures like krill in the food chain and measuring the impact of climate change.'

As well as examining Australia's historical relationship with Antarctica, the exhibition will include our continuing scientific contributions in areas such as oceanography and the study of ice.



Above: Mawson Antarctic Expedition: Steam Yacht Aurora photographed on the edge of the ice shelf off Queen Mary Land, with a group of penguins in the foreground. [A lantern slide attributed to Frank Hurley.] (National Archives of Australia: M584, 2)

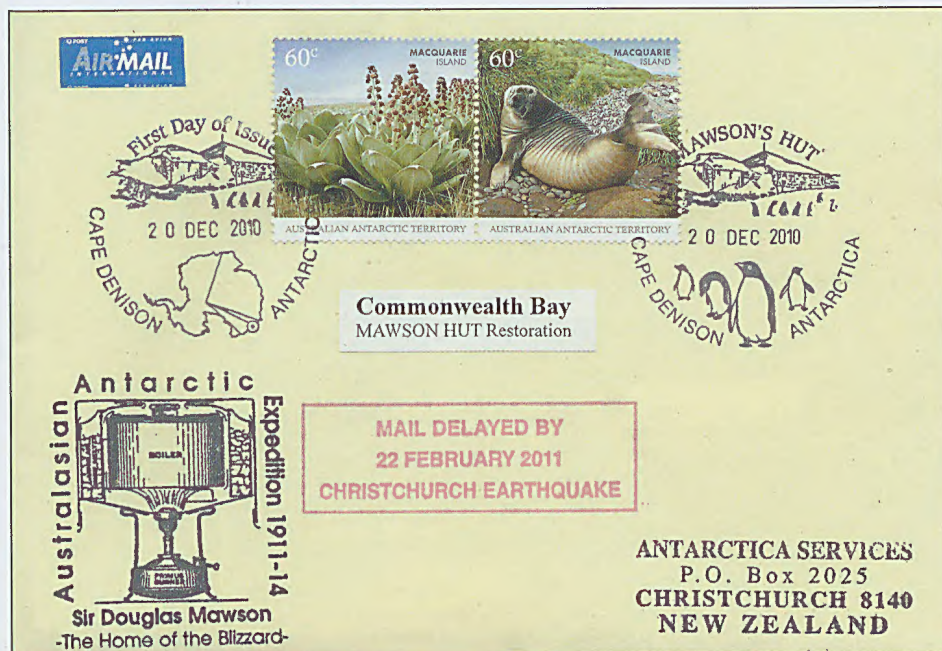
Below: Stamp cover from Commonwealth Bay Post Office. Courtesy Klaus Arne Pedersen.

It will also look at the inhabitants of Antarctica and the many challenges of living there.

Traversing Antarctica: the Australian Experience opens at the Tasmanian Museum and Art Gallery on Friday 2 December 2011 and will tour nationally until 2014.

Elizabeth Masters

National Archives of Australia



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Shipping

4-10	September	2011	Aurora Australis	VE1	Macquarie Island
14	September	2011	Aurora Australis	VE1	Arrives Hobart
16-21	October	2011	Aurora Australis	Trials	Departs Hobart for Marine Science and returns
23	October	2011	Aurora Australis	V1	Departs Hobart for Davis Station
22	October	2011	L'Astrolabe	VRO	Departs Hobart for Macquarie Island
25	October	2011	L'Astrolabe	VRO	Macquarie Island
31 3	October November	2011- 2011	L'Astrolabe	VRO	Dumont D'Urville
6-16	November	2011	Aurora Australis	V1	Davis Station
17	November	2011	L'Astrolabe	VRO	Macquarie Island
20	November	2011	L'Astrolabe	VRO	Arrives Hobart
30 3	November December	2011- 2011	Aurora Australis	V2	Arrives Hobart, departs for Casey Station
1-27	December	2011	Spirit of Enderby		Heritage Expeditions 'Mawson Centennial' expedition departs Hobart
1-20	December	2011	Orion		Centenary Voyage 1 departs Hobart
2-27	December	2011	Akademic Shokalsky		Aurora Expeditions Centenary Voyage departs Hobart
2	December	2011			Flotilla for centenary reenactment of departure of Mawson's SV Aurora from Hobart
12-20	December	2011	Aurora Australis	V2	Casey Station
29-31	December	2011	Aurora Australis	V2	Arrives Hobart, departs for marine science
7-12	January	2012	Aurora Australis	V3	Commonwealth Bay
16	January	2012	Aurora Australis	V3	Marine science
8-10	February	2012	Aurora Australis	V4	Arrives Fremantle, WA, departs for Mawson Station
22	February	2012	Aurora Australis	V4	Mawson Station
13-15	March	2012	Aurora Australis	V4	Arrives Hobart, departs for Davis Station
27-29	March	2012	Aurora Australis	V5	Davis Station

The Masters on Aurora Australis will be Murray Doyle and Scott Laughlin

The Masters on L'Astrolabe will be Benoit Hebert and Stanislas Zamora.

Flights

28	October	2011	Airbus A319	FMcM01A,B	Hobart to McMurdo and return
2	November	2011	Airbus A319	FMcM02A,B	Hobart to McMurdo and return
31	January	2012	Airbus A319	FA01A,B	Hobart to Wilkins Aerodrome and return (tentative)
7	February	2012	Airbus A319	FA02A,B	Hobart to Wilkins Aerodrome and return (tentative)
14	February	2012	Airbus A319	FA03A,B	Hobart to Wilkins Aerodrome and return (tentative)
18	February	2012	Airbus A319	FA04A,B	Hobart to Wilkins Aerodrome and return (tentative)

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